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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,219	10/03/2003	Alex Horng	HORN3167/EM	8592

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EXAMINER	
NGUYEN, TRAN N	

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/677,219	HORNG ET AL.	
	Examiner	Art Unit	
	Tran N. Nguyen	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *28 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *2-4,7-9 and 13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,5,6,10-12 and 14-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) *1-20* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Election For Restriction Requirement

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species	Figures
1	3-6
2	7
3	8-9
4	10-13
5	14-17

Applicant selected species 3, figs 8-9, read on claims 1, ~~8~~ 5-6 TAN, 10-12, 14-20. The election is without traverse. The restriction requirement is proper; therefore, is hereby made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1, 10-11, 14** and **20** are rejected under 35 U.S.C. 102(b) as being fully anticipated by **Wrobel** (US 4,737,673).

Wrobel discloses a motor (figs 1-2) comprising:

a casing (2);

an axial tube (5) assembly securely mounted to the casing, the axial tube including at least one first engaging member (shown as radially inward extended shoulder, fig 2) on an inner periphery thereof;

a stator (unnumbered, fig 1) mounted to the axial tube;

a sleeve (16) mounted in the axial tube,

the sleeve (16) including at least one second engaging member (shown as radially outward extended shoulder, fig 2) engaged with said at least one first engaging member of the axial tube at position (6', fig 2); and

a bearing (9) mounted in the sleeve;

inherently, with the arrangement of the axial tube and the bearing sleeve, the sleeve being tightly engaged with the axial tube such that the axial tube and the bearing exert forces to each other to thereby retain the axial tube and the bearing in place,

and wherein:

the casing includes a hollow tube (unnumbered, fig 1) in which the axial tube (5) is mounted, as in claim 11;

a rotor (fig 1) having a rotary shaft (1) rotatably received in the bearing of the motor, as in claim 14;

the bearing (9) is a sintered bearing, as in claim 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wrobel,** as applied in the rejection against the base claim, in view of **Taniguchi (US 6,271,611).**

Wrobel discloses the claimed invention, except the following: the axial tube includes a plurality of longitudinal slits in an upper end thereof, thereby forming a plurality of resilient tabs, and each said resilient tab has a hook on an outer side thereof.

Taniguchi, however, teaches a motor comprising a bearing support structure (figs 1-3) having the axial tube (19) includes a plurality of longitudinal slits (21) in an upper end thereof, thereby forming a plurality of resilient tabs (25), and each said resilient tab has a hook (20) on an outer side thereof. The slits are for the purpose of enabling the axial tube to be deformed elastically in the diametrical direction of the bearing box, and the hooks on the outer circumference for preventing the stator from being removed.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the axial bearing assembly by providing the axial tube with plurality of longitudinal slits in an upper end thereof, thereby forming a plurality of resilient tabs, and each said resilient tab has a hook on an outer side thereof, as taught by Taniguchi. Doing so would respectively provide means to enable the resilient deformation of the axial tube to facilitate the assembling process, and means to enhance abutment support of the axial tube to the stator assembly.

3. **Claims 12 and 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wrobel,** as applied in the rejection against the base claim, in view of **Yokozawa et al (US 5,650,678).**

Wrobel discloses the claimed invention, except the following:

the axial tube includes a plurality of engaging blocks on a lower end of an outer periphery thereof, the hollow tube of the casing including a plurality of engaging grooves in a lower end thereof for respectively and securely receiving the engaging blocks of the axial tube, thereby preventing the axial tube from rotating relative to the casing.

Yokozawa, however, teaches a motor structure (fig 1) comprising a bearing support assembly having axial tube (4) (figs 3, 5-6) includes a plurality of engaging blocks (47C-47C1) on a lower end of an outer periphery thereof, the hollow tube of the casing (2) including a plurality of engaging grooves (fig 1) in a lower end thereof for respectively and securely receiving the engaging blocks of the axial tube. These features, according to Yokazawa, are for enabling the bearing holder to accomplish positive joining between the bearing holder and a housing to ensure abutment therebetween.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the axial bearing assembly by configuring the axial tube includes a plurality of engaging blocks on a lower end of an outer periphery thereof, the hollow tube of the casing including a plurality of engaging grooves in a lower end thereof for respectively and securely receiving the engaging blocks of the axial tube, thereby preventing the axial tube from rotating relative to the casing, as taught by Yokozawa. Doing so would provide means to ensure positive joining between the bearing holder and the housing for firmly abutment therebetween.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim1, 5-6, 10-12, 14-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over **claims 1-20 of copending Application No. 10/677,234 (hereafter Co-Ap'234)** in view of **Wrobel (US 4,737,673).**

The present application and the Co-Ap'234 both substantially recite common subject matters of the claimed motor. However, the Co-Ap'234 does not disclose or claim *the axial tube including at least one first engaging member on an inner periphery thereof, and a sleeve mounted in the axial tube, with a bearing being adapted to be mounted in the sleeve, the sleeve including at least one second engaging member engaged with said at least one first engaging member of the axial tube.*

Wrobel, however, teaches a motor having a axial tube assembly comprising:

an axial tube (5) assembly securely mounted to the casing, the axial tube including at least one first engaging member (shown as radially inward extended shoulder, fig 2) on an inner periphery thereof;

a sleeve (16) mounted in the axial tube,

the sleeve (16) including at least one second engaging member (shown as radially outward extended shoulder, fig 2) engaged with said at least one first engaging member of the axial tube at position (6', fig 2); and a bearing (9) mounted in the sleeve. According to Wrobel, the axially tube assembly would ensure that the mechanical support for the bearing structure firmly and sufficiently.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the axial bearing assembly by configuring the axial tube includes at least one first engaging member and the sleeve with at least one second engaging member, wherein the two members are angaged one another, as taught by Wrobel. Doing so would provide means to firmly support the stator assembly via the bearing structure of the motor.

This is a provisional obviousness-type double patenting rejection.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (571) 272-2030. The examiner can normally be reached on M-F 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tran N. Nguyen
Primary Examiner
Art Unit 2834